

Job Name/Location:

Tag No.:

Date:

| | | |
|------|----------|----------|
| For: | File | Resubmit |
| | Approval | Other |

PO No.:

Architect: GC:

Engr: Mech:

Rep: (Company) (Project Manager)



ARUM480BTE5 (a) ARUM121BTE5
Multi V™ 5 with LGRED° 208-230V ODU (b) ARUM144BTE5
40 Ton Triple Frame Heat Pump and Heat Recovery (c) ARUM216BTE5

Performance:

Cooling Mode:

| | |
|-------------------------------|---------|
| Nominal Capacity (Btu/h) | 476,700 |
| Power Input ¹ (kW) | 32.39 |

Heating Mode:

| | |
|-------------------------------|---------|
| Nominal Capacity (Btu/h) | 540,000 |
| Power Input ¹ (kW) | 37.49 |

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at www.ahridirectory.org.

Electrical:

| Frame | (a) ARUM121BTE5 | (b) ARUM144BTE5 | (c) ARUM216BTE5 |
|------------------------------------|-----------------|-----------------|-----------------|
| Power Supply (V/Hz/Ø) ¹ | 208-230/60/3 | 208-230/60/3 | 208-230/60/3 |
| MOP (A) | 40 | 70 | 80 |
| MCA (A) | 30.9 | 51.1 | 60.3 |
| Rated Amps (A) | 26.3 | 46.1 | 54.2 |
| Compressor A (A) | 18.3 | 19.8 | 24.3 |
| Compressor B (A) | - | 18.3 | 21.9 |
| Fan (A) | 8.0 | 8.0 | 8.0 |

Piping:²

| Frame | (a) ARUM121BTE5 | (b) ARUM144BTE5 | (c) ARUM216BTE5 |
|-------------------------------------------------|-----------------|-----------------|-----------------|
| Refrigerant Charge (lbs.) | 23.2 | 26.5 | 37.5 |
| Liquid (in., O.D.) | 1/2 Braze | 1/2 Braze | 5/8 Braze |
| High Pressure Vapor (Heat Recov only; in, O.D.) | 3/4 Braze | 7/8 Braze | 1-1/8 Braze |
| Low Pressure Vapor (in., O.D.) | 1-1/8 Braze | 1-1/8 Braze | 1-1/8 Braze |

Standard Features:

- Advanced Smart Load Control
- Intelligent Heating
- HiPOR (High Pressure Oil Return)
- Smart Oil Control
- Night Quiet Operation
- Fault Detection and Diagnosis
- Active Refrigerant Control
- Variable Heat Path Exchanger
- Subcooling and Vapor Injection Control
- Liquid Cooled Inverter Controller
- Advanced Comfort Cooling

Required Accessories:

- ARCNB31 (Frame Connector Y-branch, 3 pipe heat recovery)
- ARCNN31 (Frame Connector Y-branch, 2 pipe heat recovery)

Optional Accessories:

- Air Guide - ZAGDKA52A (3 required)
- Hail Guard Kit - ZHGDKA52A (3 required)
- Low Ambient Baffle Kit - ZLABKA52A (3), Control Kit - PRVC2 (1 per system)
- Base Pan Heater - ZPLT1A52A

**Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

Operating Range:

| | |
|-----------------------|----------|
| Cooling (°F DB)** | 5 - 122 |
| Heating (°F WB) | -22 - 61 |
| Synchronous | |
| Cooling Based (°F DB) | 14 - 81 |
| Heating Based (°F WB) | 14 - 61 |

Unit Data:

| | |
|---------------------------------------------|-------------------------------------------------|
| Refrigerant Type | R410A |
| Refrigerant Control | EEV |
| Max. Number of Indoor Units ³ | 64 |
| Sound Pressure ⁴ dB(A) | 67 |
| Weight | |
| Frame | (a) ARUM121BTE5 (b) ARUM144BTE5 (c) ARUM216BTE5 |
| Net (lbs.) | 507 639 666 |
| Shipping (lbs.) | 534 666 694 |
| Communication Cable (No x AWG) ⁵ | 2 x 18 |
| Heat Exchanger Coating | Black Coated Fin™ |

Compressor:

| | |
|------------|---------------|
| Type | HSS DC Scroll |
| Quantity | 5 |
| Oil / Type | PVE / FVC68D |

Fan:

| | |
|-------------------------------------|---------------------------------------|
| Type | Propeller |
| Quantity (a) + (b) + (c) | 6 |
| Motor Drive | Brushless Digitally Controlled Direct |
| Air Flow Rate (a) + (b) + (c) (CFM) | 33,900 |

Notes:

1. Power wiring cable size must comply with the applicable local and national codes. Cables terminate at each frame.
2. For main pipe segment size, refer to the LATS Multi V tree diagram.
3. The combination ratio must be between 50-130%.
4. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745 for the combination of outdoor units.
5. Communication cable between ODU and IDUs must be 2-conductor, 18 AWG, twisted, stranded, and shielded. Ensure the communication cable shield is properly grounded to the Master ODU chassis only. Do not ground the communication cable at any other point. Wiring must comply with all applicable local and national codes.
6. Acceptable operating voltage: 187V - 253V
7. The order of these units on the submittal (i.e., a+b+c) does not represent the installation order. Highest capacity unit is used as the Master, followed by the next smaller size as Slave 1, and so on.
8. Low ambient performance with LGRED° heat technology is included in Multi V 5 units produced after February 2019.



ARUM480BTE5

Multi V™ 5 with LGRED® 208-230V ODU

40 Ton Triple Frame Heat Pump and Heat Recovery

(a) ARUM121BTE5

(b) ARUM144BTE5

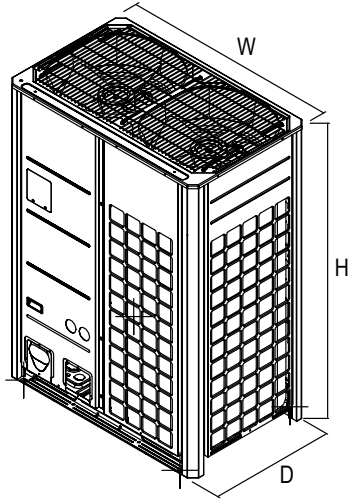
(c) ARUM216BTE5



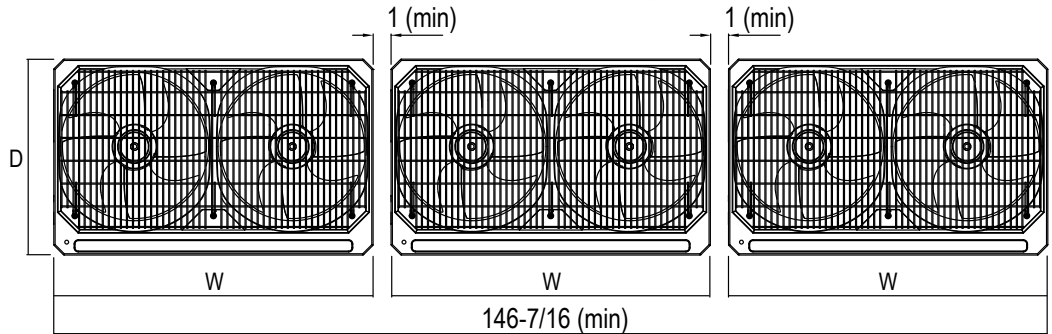
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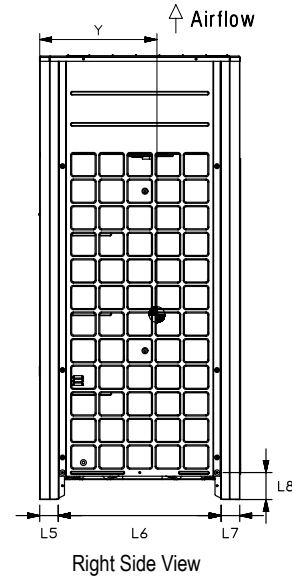
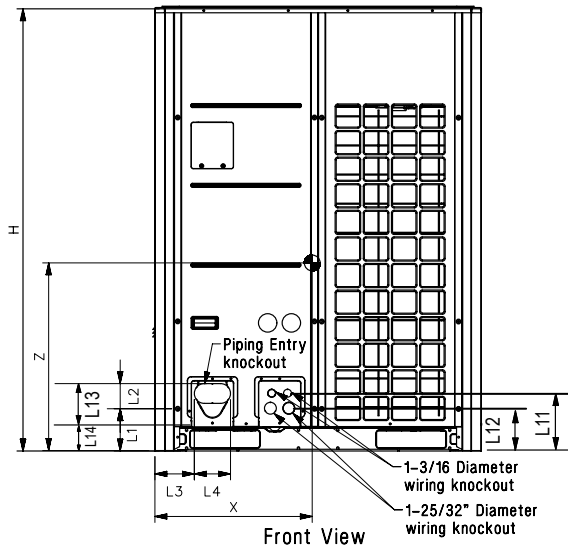
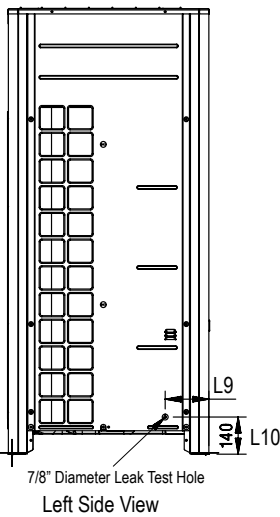
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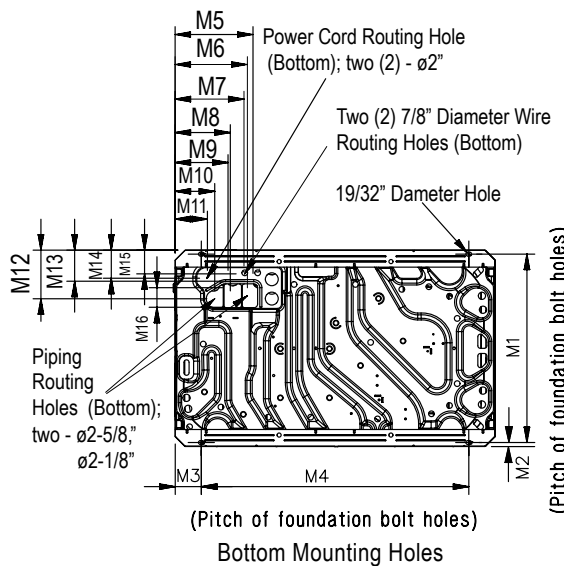
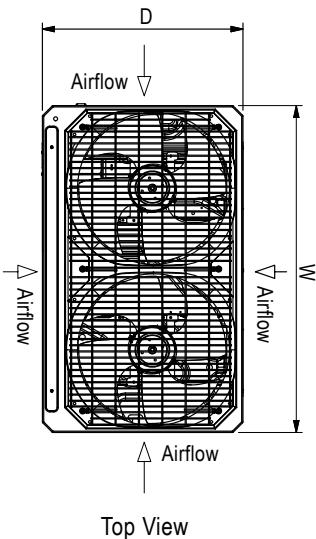
Typical Triple Frame Configuration



Note: Please refer to multi-frame placement information and piping rules in the Multi V 5 Engineering Manual and the Multi V 5 Installation Manual. Minimum spacing between frames is 1 inch.



| | |
|-----|-----------|
| W | 48-13/16" |
| H | 66-17/32" |
| D | 29-29/32" |
| L1 | 6-5/16" |
| L2 | 3-3/4" |
| L3 | 5-29/32" |
| L4 | 5-13/32" |
| L5 | 2-25/32" |
| L6 | 24-9/32" |
| L7 | 2-25/32" |
| L8 | 4-1/32" |
| L9 | 6-1/2" |
| L10 | 5-9/16" |
| L11 | 8-5/8" |
| L12 | 6-7/16" |
| L13 | 9-15/16" |
| L14 | 3-5/8" |



| | |
|-----|-----------|
| M1 | 28-25/32" |
| M2 | 5/8" |
| M3 | 3-15/16" |
| M4 | 40-15/16" |
| M5 | 11-15/16" |
| M6 | 11-1/16" |
| M7 | 10-1/2" |
| M8 | 8-7/16" |
| M9 | 8-1/8" |
| M10 | 6-1/16" |
| M11 | 4-15/16" |
| M12 | 7-1/2" |
| M13 | 4-13/16" |
| M14 | 4-5/16" |
| M15 | 3-5/8" |
| M16 | 3" |

Center of Gravity

| | |
|---|----------|
| X | 23-7/32" |
| Y | 15-5/8" |
| Z | 25-9/16" |

All dimensions have a tolerance of ± 0.25 in.
[Unit: inch]

